

friction therebetween; and

- d. generating a substantially oscillatory sliding motion in the bearing element, the oscillatory sliding motion having an oscillation path tangent with the slidable path for an interacting point between the load sliding surface and the bearing sliding surface.

142. (New) A method of assembling an ultrastiff sonic bearing, comprising:

- a. providing a bearing element having a bearing body of a controllable variable static stiffness and a controllable variable dynamic stiffness, the bearing element including a bearing sliding surface and a bearing support region;
- b. providing a base member having a base sliding region, the base sliding region being disposed in contact with the bearing support region;
- c. coupling the bearing element with a load member having a load sliding surface, wherein the bearing sliding surface and the load sliding surface are in continuous slidable contact by a force for sliding the load member along a slidable path; and
- d. converting electrical energy into microscopic mechanical displacement in the bearing element, the displacement for inducing a substantially oscillatory sliding motion having an oscillation path along the slidable path.

all
cont

Clean Version Incorporating Amendments

141. (New) A method of assembling an ultrastiff precision sonic bearing, comprising:
- a. providing a load member having a load accepting surface and a load sliding surface;
 - b. providing a bearing element having a bearing support region and a bearing sliding surface;
 - c. coupling the bearing element with the load member, wherein the load sliding surface is in slidable contact along a slidable path with the bearing sliding surface, the load sliding surface and the bearing sliding surface having a coefficient of friction therebetween; and
 - d. generating a substantially oscillatory sliding motion in the bearing element, the oscillatory sliding motion having an oscillation path tangent with the slidable path for an interacting point between the load sliding surface and the bearing sliding surface.
142. (New) A method of assembling an ultrastiff sonic bearing, comprising:
- a. providing a bearing element having a bearing body of a controllable variable static stiffness and a controllable variable dynamic stiffness, the bearing element including a bearing sliding surface and a bearing support region;
 - b. providing a base member having a base sliding region, the base sliding region being disposed in contact with the bearing support region;
 - c. coupling the bearing element with a load member having a load sliding surface, wherein the bearing sliding surface and the load sliding surface are in continuous slidable contact by a first force, wherein a second force is applied for sliding the load member along a slidable path; and
 - d. converting electrical energy into microscopic mechanical displacement in the bearing element, the displacement for inducing a substantially oscillatory sliding motion having an oscillation path along the slidable path.